

AW Axial Fans

Low pressure axial wall fans up to 39.000 m³/h

- Available with AC and EC motors for 50 and 60Hz
- Installation in any position
- Noise and energy optimized impeller

[Find more details in our online catalogue](#)



Flexible

The AW fans are **designed** for extracting air in **low pressure systems**. They can be installed in any position and way according to your demands.

This ensures that the fans can be used in a variety of **commercial** and **industrial** applications.

Performance

The **noise optimized** axial impellers together with the **high efficient** external rotor motors are designed to ensure high-level performance to **minimize power consumption** and **maximize efficiency**.

Certifications



Green Ventilation

Features

Construction

The square wall plate is made of galvanized steel with powder coating in RAL9005.

The range with **AC motors**, sizes **200-630** are provided **with inlet protection grid** and sizes **710-1000 without inlet protection grid**.

The **complete** range with **EC motors** is provided **with inlet protection grid**.

Depending on the type, the fans are equipped with an external **terminal box**, protection class **IP44, IP54 or IP55**.

Impeller

The AW fans use **axial impellers**. These are made of **coated steel**, **composite** material or **aluminum**, are dynamically **balanced** and are paired with corresponding external rotor motors.

Motor

Depending on type, AW fans are equipped with an **AC** or **EC external rotor motor**. The motors are suitable for **50Hz** and **60Hz**.

Motor protection

Sizes **200-300** with **AC** motors are available with **integrated** thermal protection with manual (electrical) reset.

Sizes **200-1000** with **AC** motors are available with prewired integral **thermal contact** with leads to a **motor protection device**.

Models with **EC** motors have an **integrated** electronic, **thermal protection** including **locked-rotor protection** and **soft-start**.

Control

EC motors can be controlled by an external **signal of 0-10V**.

EC motors depending on size are also equipped with **ModBus** communication or **alarm signal**.

AC motors can be controlled by **5-step**, **stepless** speed regulator or **frequency inverter**.

Installation

The AW fans can be installed in **any position** on **wall** or **ceiling** in **indoor** environments.

Technical parameters

Nominal data		
Voltage (nominal)	230	V
Frequency	50; 60	Hz
Phases	1~	
Input power	166	W
Input power kW	0.166	kW
Input current	1.34	A
Impeller speed	1,494	rpm
Air flow	max 3,730	m³/h
Air flow at max. efficiency	2,400	m³/h
Specific ratio	1,000000	
Temperature of transported air	max 60	°C
Max temperature of transported air, when speed controlled	60	°C

Protection/Classification		
Enclosure class, motor	IP54	
Insulation class	B	

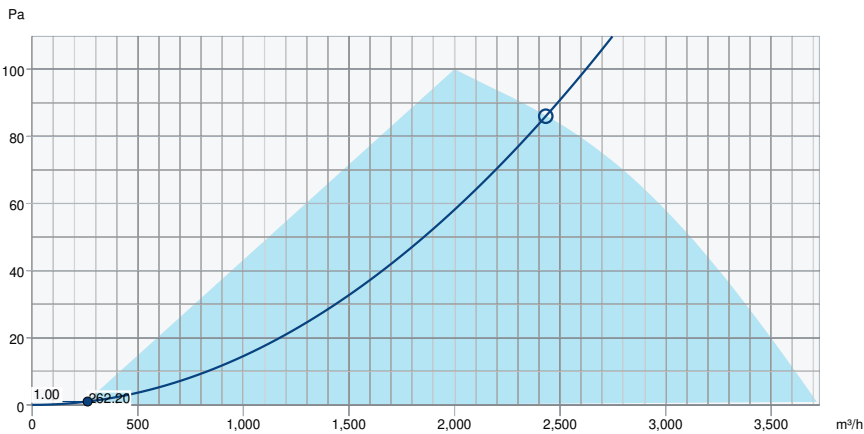
Data according to ErP		
ErP ready	ErP 2018	
Measurement category	A	
Efficiency grade	51.2	η_{actual}
Efficiency, static	39.8	η_{statA}
Target efficiency grade ErP2013	36	$\eta_{target2013}$
Target efficiency grade ErP2015	40	$\eta_{target2015}$

Dimensions and weights		
Weight	6.2	kg

Others		
Color name, casing	Black	
Motor type	EC	

Performance

Performance curve



Hydraulic data

Required air flow	2,432 m³/h
Required static pressure	86 Pa
Working air flow	262 m³/h
Working static pressure	1 Pa
Air density	1.204 kg/m³
Power	3.7 W
Fan control - RPM	220 rpm
Current	0.10 A
SFP	0.051 kW/m³/s
Control voltage	1.5 V
Supply voltage	230 V

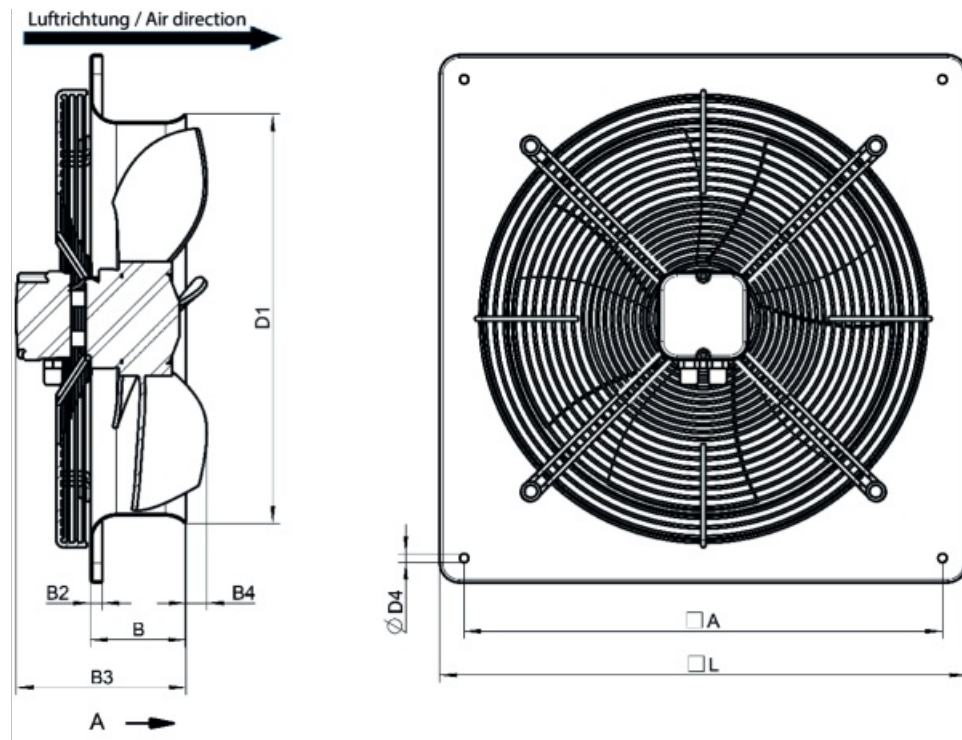
Sound power level		63	125	250	500	1k	2k	4k	8k	Total
Inlet	dB(A)	<10	<10	<10	12	<10	<10	11	12	19

Ecodesign

Ecodesign 327

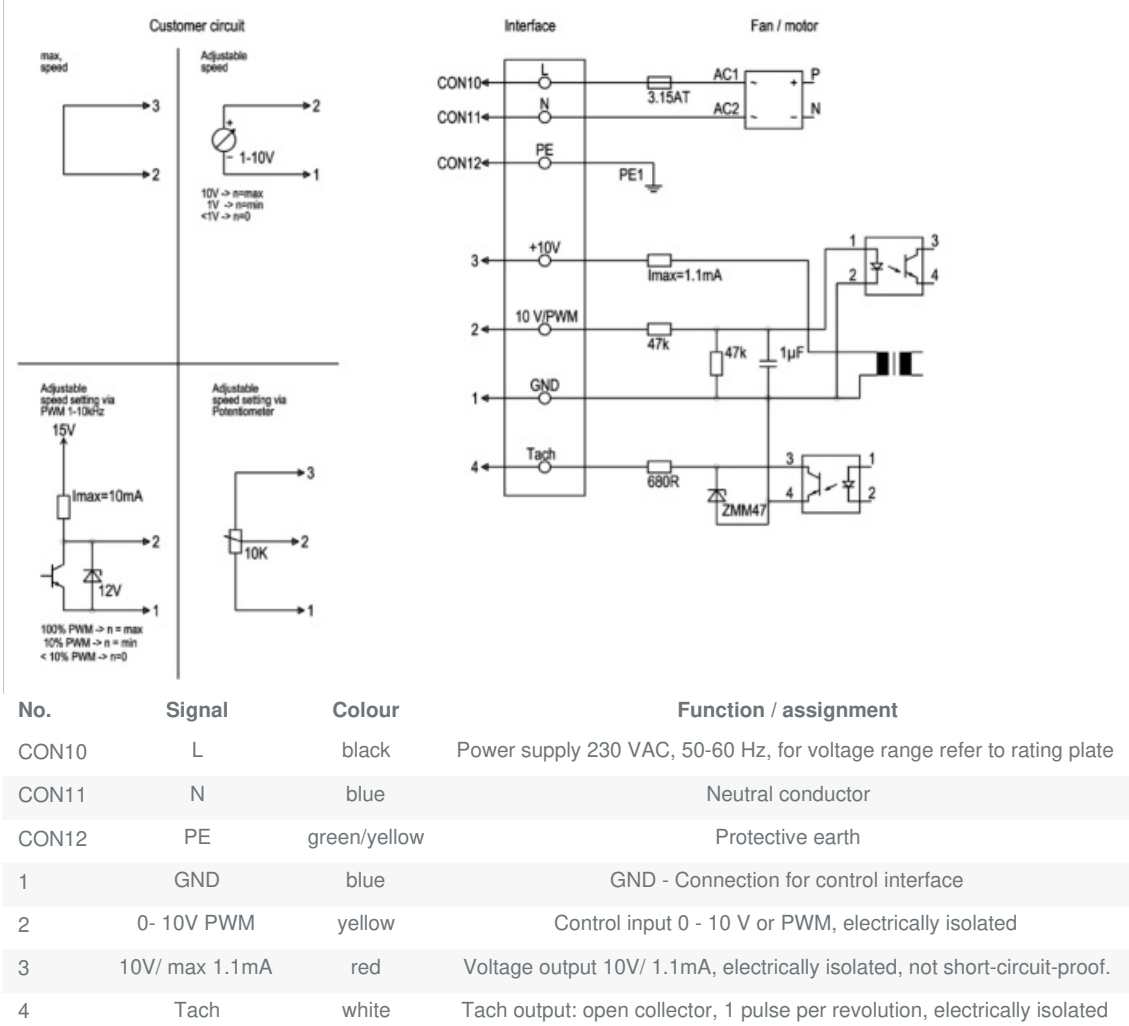
Manufacturer	Systemair GmbH	
Type	AW 350 EC	
Year of manufacture	See name plate of the fan	
Air flow qv	2,400	m ³ /h
Efficiency category	static	
Efficiency grade N	51.2	
Efficiency grade target N	40	
Speed (rpm) n	1,495	rpm
Pressure increase total psf	87	Pa
Power consumption Ped	160	W
Overall efficiency	39.8	%
Overall efficiency target	28.6	%
Variable speed drive	Yes	
Additional components	Components used to calculate the energy efficiency that are not apparent from the measurement category are detailed in the CE declaration.	
Maintenance	Information on installation, operation and maintenance is provided in the operating instructions.	
Recycling / disposal	Information on recycling and disposal is provided in the operating instructions.	

Dimension



	□A	B	B2	B3	B4	ØD1	ØD4	□L
AW 350 EC sileo	435	80	12	157	11	388	9	485

Wiring



No.	Signal	Colour	Function / assignment
CON10	L	black	Power supply 230 VAC, 50-60 Hz, for voltage range refer to rating plate
CON11	N	blue	Neutral conductor
CON12	PE	green/yellow	Protective earth
1	GND	blue	GND - Connection for control interface
2	0- 10V PWM	yellow	Control input 0 - 10 V or PWM, electrically isolated
3	10V/ max 1.1mA	red	Voltage output 10V/ 1.1mA, electrically isolated, not short-circuit-proof.
4	Tach	white	Tach output: open collector, 1 pulse per revolution, electrically isolated

Accessories

- EC-Basic-CO2 and temperature (24808)
- EC-Basic-T temperature (24805)
- EC-Vent control board (3115)
- MTP 10, 10K, Speed control (32731)
- Potentiometer MTP 20, 0-10V (310220)
- Step switch S-5EC-2, 0-10V (449084)
- VK-40 Louvre shutter (87691)
- EC-Basic-H humidity (24807)
- EC-Basic-U universal 0-10V (24806)
- EC-Vent Room Unit (3018)
- MTV-1/010 Controller 0..10V+ (30650)
- REV-3POL/03-7,5kW R/Y (33978)
- VK-35 Louvre shutter (5642)

Documents

- MANUAL_AW__AR_EBM_EN_003-MIN.PDF
- DWG - 35859
- EU Declaration of Conformity_002
- installation variations_2_AR_AW.pdf